Amendments to the Specification

Add the following new heading before paragraph [0002]:

BACKGROUND

Add the following new heading before paragraph [0014]:

SUMMARY OF THE INVENTION

Please replace paragraph [0014] with the following amended paragraph:

[0014] The ~~object of the~~ present invention provides ~~is to create~~ a method that will optimize a lead time for an upstream product of a delivery unit in a manufacturing network without requiring a model of the manufacturing network or knowledge of manufacturing capacities. This method should also be applicable when demand for the upstream product is variable over time.

Please replace paragraph [0015] with the following amended paragraph:

[0015] ~~This object is achieved by the method as recited in Claim 1, the device as recited in Claim 11, and the computer program product as recited in Claim 12 or Claim 13. Advantageous embodiments are characterized in the subclaims.~~ In an exemplary embodiment of the present invention, a method for automatically determining a correction period of time (ΔVLZ_opt) for correcting an actual lead time for delivery of an upstream product (V) which is manufactured with an actual lead time (VLZ_actual) by a delivery unit of a manufacturing network, wherein a quantity of the upstream product (V) to be completed in each case by the delivery unit to cover demand of an end user of the manufacturing network, being determined for multiple points in time and stored in the form of a setpoint delivery curve. The method according to the present invention comprises the steps of, for multiple points in time, determining and storing, in the form of an inventory curve, a quantity of the upstream product (V) completed by the delivery unit but not yet used by a downstream delivery unit, determining the correction period of time (ΔVLZ_opt) by a selection from a quantity of possible periods of time (ΔVLZ), calculating, for each possible period of time, a simulated inventory curve, for each possible period of time using the setpoint delivery curve and the inventory curve, the simulated inventory curve indicating for multiple points in time: a quantity of upstream product (V) that would have been completed by

the delivery unit at a particular point in time and not yet used by a downstream delivery unit, if the lead time required by the delivery unit for the upstream product (V) had been altered by the possible period of time in comparison with the actual lead time (VLZ_actual), and selecting as the correction period of time (ΔVLZ_opt) the period of time of the possible periods of time resulting in a simulated inventory curve that is optimal with respect to an optimization criterion (σ) based on the simulated inventory curves. In addition, the present invention provides a device, which can comprises a computer having an internal memory, and a computer program product for automatically determining a correction period of time (ΔVLZ_opt), as determined by the method of the invention.

Add the following new heading before paragraph [0021]:

BRIEF DESCRIPTION OF THE DRAWINGS

Add the following new heading before paragraph [0033]:

DETAILED DESCRIPTION

Please replace paragraph [0074] with the following amended paragraph:

[0074] In summary, the present invention ~~relates to~~ provides a method for automatically determining a correction period of time for correcting an actual lead time for the delivery of an upstream product which is manufactured by a delivery unit of a manufacturing network. According to the present invention, a setpoint delivery curve and an inventory curve are determined. The setpoint delivery curve indicates the quantity of upstream product required by an end user of the manufacturing network in each case; the inventory curve indicates the quantity of upstream product completed by the delivery unit but not yet delivered. The correction period of time is selected by optimization over a quantity of possible periods of time. To do so, a simulated inventory curve is calculated for each possible period of time. Such a simulated inventory curve for a possible period of time indicates, for multiple points in time, which quantity of upstream product would have been completed by the delivery unit at the particular point in time and not yet delivered if the lead time required by the delivery unit for the upstream product had been altered by the possible period of time in comparison with the actual lead time. For example, the scattering in the simulated inventory curves over time may be used as an

optimization criterion. In addition, the present invention provides a device, which can comprises a computer having an internal memory, and a computer program product for automatically determining a correction period of time (ΔVLZ_opt), as determined by the method of the invention.